<110>   David, Weinstein

<120>   NOVEL GROWTH FACTOR OPA1 AND USES THEREOF

<130>   96700/595

<140>   US 09/479,145

<141>   2000-01-07

<150>   09/294,764

<151>   1999-04-19

<160>   4

<170>   PatentIn version 3.0

<210>   1

<211>   1680

<212>   DNA

<213>   mouse

<220>

<221>   Unsure

<222>   (1098)..(1104)

<223>   n at positions 1098-1104 may be t, a, c, or g

<400>   1

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attattttaa ttggtttaaa gtccctttat aaagagtgct acatggttta gataaaggaa     360
acatataact attgagttac aggggatttt attaattata aaatgcaatc aatttaaatt     420
acgtaggttt aagactagtc ccttggataa gccccaagcg aatttgtctt cagattatta     480
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tctaggcaaa agaaaagctc agttgggttt cacgagtgtt cctgtgctta tattcagtct   900

gtgcctacat gttctcatgc atgtctaacc tgatttacct cttacctgta acctaccttta   960

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cagaactcac attggcaagt gtaaaaagat gacttaaggt gaagtgagga caaaatcaca   1080

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aataactaac ttgctcaaat atggagaaaa ctcaataggg ttcagggagg ttctggcagt   1500

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cacattccaa attttaaata aaagcattta ctcaattatt ataaaacaac atatttaaaa   1620

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<211>   1680

<212>   DNA

<213>   homo sapiens

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cacattccaa attttaaata aaagcattta ctcaattatt ataaaacaac atatttaaaa     1620

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<210> 3

<211> 20

<212> DNA

<213> artificial sequence

<220>

<221> primer_bind

<222> (1)..(20)

<223> degenerate primer corresponding to deduced opa1 protein sequence;
      n at positions 3, 6, 13, and 16 may be t, a, c, or g

<400> 3

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<210> 4

<211> 20

<221> primer_bind

<222> (1)..(22)

<223> degenerate primer corresponding to deduced opa1 protein sequence;
n at positions 7, 10, 13, 16, 19, and 22 may be t, a, c, or g

<400> 4

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